UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,345	05/15/2001	Neophytos A. Antoniades	SP00-148	1778

22928 7590 08/25/2004

CORNING INCORPORATED
SP-TI-3-1
CORNING, NY 14831

EXAMINER	
PAYNE, DAVID C	

ART UNIT	PAPER NUMBER
2633	7

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/858,345	ANTONIADES ET AL.	
	Examiner	Art Unit	
	David C. Payne	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *30-37* is/are allowed.

6)☒ Claim(s) *1-29 and 38-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5 and 6*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-29 and 38-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Alvarez et al. US 20020165962 A1 (Alvarez).

Regarding claims 1 and 2-10 Alvarez disclosed,

A wavelength selective optical cross-connect device comprising: a. a first demultiplexor arranged to demultiplex an incoming signal; b. a plurality of individually removable modules, each module arranged to receive an output of the first demultiplexor and each including at least an optical switch for switching said output of the first demultiplexor. (see e.g., Figure 3, 4, 8, 9-11 and 35, paragraphs 0086-0096, 0103, 0104, 0112, 0147-0151, 0285-0285).

Regarding claims 11, and 12-20 Alvarez disclosed,

A wavelength selective optical cross-connect device comprising a. a first demultiplexor arranged to demultiplex an incoming signal; b. a first multiplexor arranged to provide an outgoing signal; and c. a plurality of individually removable modules, each module arranged to receive a respective output of the first demultiplexor and feed a respective output of said

module into said first multiplexor, each module including at least (i) a second demultiplexor arranged to further demultiplex the respective output of the first demultiplexor, (ii) a power equalization matrix arranged to equalize the power in channels from the second demultiplexor, and (iii) a second multiplexor arranged to pre-multiplex the channels from the second demultiplexor to form the output of said module. (see e.g., Figure 3, 4, 8, 9-11 and 35, paragraphs 0086-0096, 0103, 0104, 0112, 0147-0151, 0285-0285).

Regarding claims 21, and 22-24 Alvarez disclosed,

A wavelength add-drop module device for receiving network management messages or commands from a network management controller transmitted with communications traffic via a fiber connection, the device comprising a tap on the signal from an incoming fiber connection and a receiver arranged to detect signals on the tap. (see e.g., Figure 3, 4, 8, 9-11 and 35, paragraphs 0086-0096, 0103, 0104, 0112, 0147-0151, 0285-0285).

Regarding claims 25, and 26-29 Alvarez disclosed,

A wavelength selective optical cross-connect device for providing ring or network management, the device comprising subcarrier demodulator for receiving messages from one or more wavelength add-drop modules on the associated ring or network, and a transmitter for transmitting messages at a selected wavelength to said modules. (see e.g., Figure 3, 4, 8, 9-11 and 35, paragraphs 0086-0096, 0103, 0104, 0112, 0147-0151, 0285-0285).

Regarding claim 38, Alvarez disclosed,

A wavelength selective optical cross-connect device comprising: a pair of wavelength-layered cross-connect switch fabrics, the pair of fabrics being connectively surrounded by one-by-two switches so arranged as to be able to switch any input or output associated with the fabrics from one of the pair of fabrics to the other of the pair of fabrics to a provide protection switching function, while the fabrics are arranged provide path switching function. (see e.g., Figure 3, 4, 8, 9-11 and 35, paragraphs 0086-0096, 0103, 0104, 0112, 0147-0151, 0285-0285).

Regarding claim 39, Alvarez disclosed,

A method of providing protection switching and path switching in a wavelength selective optical cross-connect device, the method comprising: employing one-by-two switches to selectively connect input and output wavelength channels to either of two wavelength-layered cross-connect fabrics to provide a protection switching function; and employing said two wavelength-layered cross-connect fabrics to provide a path switching function. (see e.g., Figure 3, 4, 8, 9-11 and 35, paragraphs 0086-0096, 0103, 0104, 0112, 0147-0151, 0285-0285).

Regarding claim 40, 41 and 43 Alvarez disclosed,

A wavelength selective cross-connect device for interconnecting two or more fiber rings, the device comprising a first optical switch arranged and positioned so as to be able to

selectively connect a first loop of a first ring to either a first loop of a second ring or a second loop of the second ring; and a second optical switch arranged and positioned so as to be able to selectively connect a second loop of the first ring to either the first loop of the second ring or the second loop of the second ring. (see e.g., Figure 3, 4, 8, 9-11 and 35, paragraphs 0086-0096, 0103, 0104, 0112, 0147-0151, 0285-0285).

Regarding claim 42, Alvarez disclosed,

A wavelength selective optical cross-connect device comprising an input signal path including, in order, a wide band amplifier, a first demultiplexor, and a plurality of narrow band amplifiers arranged in parallel. (see e.g., Figure 3, 4, 8, 9-11 and 35, paragraphs 0086-0096, 0103, 0104, 0112, 0147-0151, 0285-0285).

Allowable Subject Matter

3. Claims 30-37 are allowed.
4. The following is an examiner's statement of reasons for allowance: Alvarez does not disclose or reasonably suggest A method of providing for communications for ring or network management in an optical fiber network that is at least in part ring-based, the method comprising: providing at least one wavelength selective cross-connect on a ring in the network, the cross-connect including a controller or mediation function and at least one transmitter arranged to transmit on a network communications frequency and a subcarrier

demodulator; providing one or more wavelength add-drop modules connected to said ring and each including a subcarrier modulator for sending signals to said subcarrier demodulator; sending control messages from the controller to the one or more wavelength add-drop modules via the transmitter on the a network communications frequency; receiving said control messages from the controller in the one or more wavelength add-drop modules; sending messages from the one or more wavelength add-drop modules to the controller via subcarrier modulation; and receiving and decoding said messages from the one or more wavelength add-drop modules via subcarrier demodulation.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (703) 306-0004. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp

David C. Payne

Patent Examiner

AU 2633